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Cheree L. B. Stevens

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EXAMINER

BEKKER, KELLY JO

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/629,991	Applicant(s) STEVENS ET AL.	
	Examiner KELLY BEKKER	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 35-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 35-49 is/are rejected.
- 7) ☒ Claim(s) 35-42, 48 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 29, 2010 has been entered.

Claim Objections

Claims 35-42, 48, and 49 are objected to because of the following informalities: Claim 35 recites, "wherein the mix of ingredients comprise *from* wheat starch in an amount of from 49.31% to about 60%...". The first recitation of the term "from" appears to be a typographical error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 10-14, 22, and 43-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites, "wherein the oxidized and substituted wheat starch comprises and oxidized and acetylated wheat starch". The phrase is unclear as it is not known if the claim intends to recite that the "wheat starch is oxidized and acetylated" or that the "wheat starch component comprises an oxidized and acetylated wheat starch" or that the "wheat starch comprises an oxidized and substituted wheat starch and a second oxidized and acetylated wheat starch" or if the term has some other meaning.

Claim 10 recites "the coating composition comprises from about 32% to about 40% by weight corn dextrin". Claim 10 depends from claims 1 and 7 which recite the coating composition by dry weight, wherein the film forming agent, which would be dextrin, is from about 5-75% by dry weight. Thus, it is unclear as to if the weight recited in claim 10 is by total weight of the coating composition or by dry weight of the composition. For the purpose of examination, the weight will be considered dry as recited in the independent claims. This position is supported by examples in the specification and by claim 35, which recites the coating comprises about 20-40% corn dextrin by dry weight.

Claims 11, 14, 22, and 43 are rejected for the same reasons as claim 10.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Roskam:

The 103(a) rejection of claims 10-13, 35-38, 41, and 43-48 as being unpatentable over Roskam et al. (US 2003/0044488 A1) in view of Lenchin et al (US 4510166) has been withdrawn in light of applicant's 131 affidavit showing prior invention to the coating containing about 49-90% starch and about 30-32% corn dextrin.

The 103(a) rejection of claims 39, 40, 42, and 49 as being unpatentable over Roskam in view of Lenchin et al (US 4510166), further in view of Fennema ed. (Food Chemistry 3rd Edition) has been withdrawn in light of applicant's 131 affidavit showing prior invention to the coating containing about 49-90% starch and about 30-32% corn dextrin.

Claims 1-5, 7-9, and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roskam et al. (US 2003/0044488 A1) in view of Lenchin et al (US 4510166).

Roskam teaches of a composition comprising a pastry product at least partially coated with a substantially clear (i.e. transparent) coating composition comprises a

Art Unit: 1781

substituted oxidized wheat starch component (i.e. a modified starch component) wherein the coating composition provides at least a partial moisture barrier on the pastry product, wherein the pastry product is low moisture content dough and comprises wheat flour. Roskam teaches that the pick up for the coating composition is applied as slurry, and that the slurry composition includes 32-48% solids. Roskam teaches that the coating composition includes 50-100% starch, 4-20% dextrin (i.e. a film former), 0.1-0.3% stabilizers including xanthan gum, 11% sugar, i.e. granulated sugar, and 0.1-3% leavening agents comprising 0.1-3% sodium acid pyrophosphate and/or 0.1-3% sodium bicarbonate. Roskam teaches that the slurry composition pick up can vary depending on the substrate material. Roskam teaches that the slurry pickup is 25-35% for baked goods, including toaster pastries. Roskam teaches that the slurry composition has a Strain viscosity of about 4-20 seconds. Specifically regarding the coating composition as applied at a temperature from about 40-100F, Roskam teaches of applying the coating to a substrate without additional heating or cooling, thus it would be inherent that Roskam teaches of applying the coating at about 70F (i.e. room temperature). Refer specifically to Abstract, Paragraphs 0002, 0013-0015, 0020-0023, 0026-0028, 0034-0036, and 0040-0044. Roskam teaches that the coating acts as moisture barrier where applied to the substrate upon thermal processing (paragraphs 0015, 0026, and 0036). Roskam teaches that dextrin is utilized to modify the texture and tensile of the final coated product (paragraphs 0034 and 0035).

Roskam is silent to the type of dextrin in the coating composition as recited in claims 1 and 17, wherein the corn dextrin has a low solubility as recited in claim 21.

Lenchin teaches that corn dextrin provides a suitable type of dextrin to use when producing coating compositions (Abstract and Column 4 lines 53-54).

Regarding the dextrin as corn dextrin that is low solubility of less than about 15% in 77F water, as Roskam teaches of using a dextrin in a coating composition, does not teach what type of dextrin to utilize, one would have been motivated to look to the coating art, such as Lenchin, to determine what type of dextrin to utilize in the coating. One would have been motivated to use corn dextrin as the dextrin coating as taught by Roskam because Lenchin teaches that corn dextrin is a suitable type of dextrin to use in

Art Unit: 1781

coating compositions. One would have been further motivated to chose a solubility level corn dextrin depending on the desired texture and tensile strength of the final product.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roskam in view of Lenchin et al (US 4510166), further in view of Fennema ed. (Food Chemistry 3rd Edition pages 201-204).

Roskam teaches of a pastry product with a substantially clear partial moisture barrier coating containing modified food starch, as discussed above. Roskam teaches that the dried coating composition includes 50-100% modified starch, including oxidized and/or acetylated substituted starch (paragraphs 0022). Roskam is silent to the substitution level of the modified food starch as from 0.01% to about 1% and to the starch as acetylated as recited in claim 6.

Fennema teaches that modified starch usually has a substitution level of less than 0.1 and generally within the range of 0.002-0.2 (Page 201 Section 4.4.9 Paragraph 3). Fennema teaches that acetylation of starch lowers gelatinization temperature, improves paste clarity, and provides stability to coating compositions (page 202). Fennema teaches that starches are modified to improve their behavioral characteristics (Page 201 Section 4.4.9 Paragraph 1).

Regarding the substitution level of the modified food starch, as Roskam does teaches of a modified starch but does not teach of the substitution level of the starch, one of ordinary skill in the art would have been motivated to look to the food art, such as Fennema, to find the starch substitution level. One would have been further motivated to use starch with a substitution level of 0.002-0.2, as taught by Fennema, since it was commonly utilized in foods and would be readily available.

Regarding the starch as acetylated, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the modified starch in the coating composition as taught by Roskam to include acaetylated starch in view of Fennema. One would have been motivated to use acetylated starch in the coating in order to improve paste clarity and provide stabilization as taught by Fennema.

Lazard

Claims 1-5, 7-11, 14-20, 22, 23, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazard et al. (EP 0547551 A1) in view of Tsen et al (US 3773521).

Lazard et al (Lazard) teaches of a composition including pastry products (page 3 lines 41-45) at least partially coated with a substantially clear, i.e. invisible, coating composition (page 9 lines 19-22) comprising a modified oxidized wheat starch (page 7 lines 18-37) and a film forming agent comprising corn dextrin (page 6 line 56 through page 7 line 8 and Table III), wherein the composition provides a moisture barrier on the pastry product where applied (abstract). Lazard teaches that the coating composition is a slurry with 5-40% water and thus 60-95% solids (abstract). Lazard teaches that the coating composition contains 5-40% modified starch component (abstract), 0-5% stabilizers, 0-5% acids and bases, i.e. leavening agents, 0-5% flavorants (page 5 lines 11-16), and 20% corn dextrin (table XII). Lazard teaches that the coating composition is allowed to solidify to a solid film, i.e. the films are dried (Page 8 line 56 through page 9 line 12). Thus, based on dry weight or the dried coating composition of Lazard, the composition comprises 12.5-66.7% starch, 26.6-80% corn dextrin, 0-16.7% stabilizers, 0-16.7% leaving acids, and 0-16.7% flavorants. Lazard teaches that the coating thickness is adjust to produce the coating with the desired strength and handling characteristics (page 9 lines 8-18). Lazard teaches that the coating is thermally processed, at about 90C, to form a moisture barrier and applied to the pastry composition, which is at room temperature, i.e. about 70F (page 8 line 56 though page 9 line 2). Note: Lazard does not specifically teach of sweeteners, sodium acid pyrophosphate (SAP), and sodium bicarbonate, thus teaching of 0% sweeteners, 0% sodium acid pyrophosphate (SAP), and 0% sodium bicarbonate.

Lazard is silent to the pastry product as comprising wheat flour as recited in claims 1 and 17, to the pastry product as a low moisture content dough as recited in

Art Unit: 1781

claim 3, to the coating composition as comprising granulated sugar as recited in claims 15 and 23, and to the slurry pick up on the pastry as recited in claims 16.

Tsen et al (Tsen) teaches that wheat flour based breads, baked or fired foods are staple foods in many countries because of their relatively high caloric value, ready availability of wheat flour at an economical price, and attractive organoleptic and appearance properties of the food products (Column 1 lines 20-25).

Regarding the pastry product as comprising wheat flour, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise particular ingredients depending on the final product desired. For example, one would have been motivated for the pastry product to comprise wheat flour in order to produce a high caloric product. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise wheat flour since it is ready availability at an economical price, and has attractive organoleptic and appearance properties when used in food products, as taught by Tsen.

Regarding the pastry product as low moisture content dough, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to be of low or high moisture dough depending on the final product desired. For example, one would have been motivated to use a low moisture dough product in order to have a drier more crunchy final product. Both low and high moisture content dough were well known at the time the invention was made and to chose one or the other for the pastry product of Lazard would be within the routine determination of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

Regarding the coating composition as containing granular sugar, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a desired flavoring in the coating composition as taught by Lazard. One would have been motivated to use the well known flavorant, granular sugar, in the coating composition in order to impart a sweet flavor. To adjust the sweetness of a food

Art Unit: 1781

product by adding granular sugar was well known and would be routine determination of one of ordinary skill in the art at the time the invention was made.

Regarding the slurry pick up on the toaster pastry, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry coating to be of a thickness, and thus to have a specific pick up, depending on the properties desired in the final coating, as taught by Lazard. To adjust the thickness and pick up of the coating composition would be routine determination of one of ordinary skill in the art at the time the invention was made, as taught by Lazard, and would not impart a patentable distinction to the claims absent any clear and convincing arguments and/or evidence to the contrary.

Claims 12, 13, 21, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazard et al. (EP 0547551 A1) in view of Tsen et al (US 3773521), further in view of Lenchin et al. (US 4510166).

Lazard teaches of a composition including pastry products at least partially coated with a moisture barrier as discussed above. Lazard teaches that dextrin is used, such as disclosed in Lenchin et al, US 4510166 (page 7 lines 7-8). Lazard is silent to the solubility level of the corn dextrin as recited in claims 12, 13, 21, and 47.

Lenchin et al. (Lenchin) teaches of converted starches in coating compositions (abstract and Column 8 lines 21 and 26-34). Lenchin teaches that the coating strength and texture are a result of the solids and thus solubility level of the starch (Table II).

Regarding the solubility level of the corn dextrin, it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the solubility level of the corn dextrin depending on the coating strength and texture desired as taught by Lenchin. To do so would not impart a patentable distinction to the claims as it was within the routine determination and ordinary ingenuity of one of ordinary skill in the art as taught by Lenchin.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazard et al. (EP 0547551 A1) in view of the combination of Tsen et al (US 3773521), further in view Fennema ed. (Food Chemistry 3rd Edition pages 201-204).

Lazard teaches of a composition including pastry products at least partially coated with a moisture barrier as discussed above. Lazard is silent to the oxidized modified wheat starch as substituted to a particular degree and to the wheat starch as including acetylated starch as recited in claim 6.

Fennema teaches that starches are modified to improve their behavioral characteristics (Page 201 Section 4.4.9 Paragraph 1). Fennema teaches that acetylation of starch lowers gelatinization temperature, improves paste clarity, and provides stability to coating compositions (page 202). Fennema teaches that modified starch usually has a substitution level of less than 0.1 and generally within the range of 0.002-0.2 (Page 201 Section 4.4.9 Paragraph 3).

Regarding the substitution level of the starch, since, Lazard teaches of a modified starch but does not teach of the substitution level of the starch, one of ordinary skill in the art would have been motivated to look to the food art, such as Fennema, to find the starch substitution level. One would have been motivated to use starch with a substitution level of 0.002-0.2 as taught by Fennema since it was commonly utilized in foods and would be readily available.

Regarding the starch as acetylated, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the modified starch in the coating composition as taught by Lazard to include acaetylated starch in view of Fennema. One would have been motivated to use acetylated starch in the coating in order to improve paste clarity and provide stabilization as taught by Fennema.

Claims 35-38, 41, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazard et al. (EP 0547551 A1) in view of the combination of Tsen et al (US 3773521) and Baur et al (WO 94/21143).

Lazard et al (Lazard) teaches of a composition including pastry products (page 3 lines 41-45) at least partially coated with a substantially clear, i.e. invisible, coating

Art Unit: 1781

composition (page 9 lines 19-22) comprising a modified oxidized wheat starch (page 7 lines 18-37) and a film forming agent comprising corn dextrin (page 6 line 56 through page 7 line 8 and Table III), wherein the composition provides a moisture barrier on the pastry product where applied (abstract). Lazard teaches that the coating composition is a slurry with 5-40% water and thus 60-95% solids (abstract). Lazard teaches that the coating composition contains 5-40% modified starch component (abstract), 0-5% stabilizers, 0-5% acids and bases, i.e. leavening agents, 0-5% flavorants (page 5 lines 11-16), and 20% corn dextrin (table XII). Lazard teaches that the coating composition is allowed to solidify to a solid film, i.e. the films are dried (Page 8 line 56 through page 9 line 12). Thus, based on dry weight or the dried coating composition of Lazard, the composition comprises 12.5-66.7% starch, 26.6-80% corn dextrin, 0-16.7% stabilizers, 0-16.7% leaving acids, and 0-16.7% flavorants. Lazard teaches that the coating thickness is adjust to produce the coating with the desired strength and handling characteristics (page 9 lines 8-18). Lazard teaches that the coating is thermally processed, at about 90C, to form a moisture barrier and applied to the pastry composition, which is at room temperature, i.e. about 70F (page 8 line 56 though page 9 line 2). Note: Lazard does not specifically teach of sweeteners, sodium acid pyrophosphate (SAP), and sodium bicarbonate, thus teaching of 0% sweeteners, 0% sodium acid pyrophosphate (SAP), and 0% sodium bicarbonate.

Lazard is silent to the pastry product as a toaster pastry comprising wheat flour as recited in claim 35, to the coating composition as containing about 0.5-2.5% or about 1.8% sodium acid pyrophosphate (SAPP) and about 0.5-2.5% or about 1.2% sodium bicarbonate as recited in claims 35 and 38, to the coating composition as comprising about 10-20% or about 14% granulated sugar as recited in claims 35 and 38, to the stabilizer in the coating composition as xanthan gum as recited in claims 37, 38, and 48, to the viscosity of the coating composition as measured by the Stein viscosity method as recited in claim 41.

Tsen et al (Tsen) teaches that wheat flour based breads, baked or fired foods are staple foods in many countries because of their relatively high caloric value, ready

availability of wheat flour at an economical price, and attractive organoleptic and appearance properties of the food products (Column 1 lines 20-25).

Baur et al (Baur) teaches of a barrier coating composition for food products (abstract and page 1 line 36 through line 5). Baur teaches that the coating composition contains xanthan gum in order to hydrate the starch, leading to improved product qualities as well as providing enrobing stability (page 5 lines 27-35). Baur teaches that additional leavening components contribute to the appearance, texture and keeping qualities of the final product (page 6 lines 22-28 and page 7 lines 27-36). Baur teaches that leavening agents and acids include about 0.1-2.5% sodium bicarbonate and about 0.1-3.5% SAPP (page 8 lines 1-13). Baur teaches of an improved crispy coating composition (abstract) comprising a unique blend of starches, dextrin, and gums (page 2 lines 8-16). Baur teaches that the starches improve the textural properties of the coating composition (page 3 lines 9-12). Baur teaches that the coating contains about 5-50% starch (Table I) and 2-20% dextrin (page 5 lines 6-16).

Regarding the pastry product as comprising wheat flour, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise particular ingredients depending on the final product desired. For example, one would have been motivated for the pastry product to comprise wheat flour in order to produce a high caloric product. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise wheat flour since it is readily available at an economical price, and has attractive organoleptic and appearance properties when used in food products, as taught by Tsen.

Regarding the pastry product as a toaster pastry, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to be toaster or other type depending on the final product desired. For example, one would have been motivated to use a toaster product in order to have a final product which was heated in the toaster before consumption.

Regarding the coating composition as containing about 0.5-2.5% or about 1.8% sodium acid pyrophosphate (SAP) and about 0.5-2.5% or about 1.2% sodium

Art Unit: 1781

bicarbonate, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include about 0.1-2.5% sodium bicarbonate and about 0.1-3.5% SAPP in the coating composition as taught by Lazard in view of Baur. One would have been motivated to do so because Baur teaches that additional leavening components contribute to the appearance, texture and keeping qualities of the final product.

Regarding the coating composition as comprising about 10-20% or about 14% granulated sugar, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a desired flavoring in the coating composition as taught by Lazard. One would have been motivated to use the well known flavorant, granular sugar, in the coating composition in order to impart a sweet flavor. One would have been further motivated to include an amount of sugar depending on the desired sweetness in the final product. To adjust the sweetness of a food product by adding granular sugar was well known and would be routine determination of one of ordinary skill in the art at the time the invention was made.

Regarding the 0-5% stabilizer in the coating composition of Lazard as xanthan gum, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the stabilizer to be xanthan gum as taught by Baur. One would have been motivated to use xanthan gum because it is a stabilizer which better hydrated the starch in the coating composition which leads to improved product qualities in the final product, as taught by Baur.

Regarding the viscosity of the coating composition as measured by the Stein viscosity method, since the references of record teach of substantially the same coating composition as instantly claimed, one of ordinary skill in the art at the time the invention was made would expect that the coating as taught by the references of record to have substantially the same properties, including Stein viscosity, as the instantly claimed composition, absent any clear and convincing arguments and/or evidence to the contrary. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the viscosity of the coating composition so that it could be readily handled and easily applied to foods as taught by Lazard (page 3 lines 9-15).

Claims 39, 40, 42, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazard et al. (EP 0547551 A1) in view of the combination of Tsen et al (US 3773521) and Baur et al (WO 94/21143), further in view Fennema ed. (Food Chemistry 3rd Edition pages 201-204).

Lazard teaches of a composition including pastry products at least partially coated with a moisture barrier as discussed above. Lazard is silent to the oxidized modified wheat starch as substituted to about 0.1% and as comprising oxidized and acetylated wheat starch as recited in claims 39, 40, and 49.

Fennema teaches that starches are modified to improve their behavioral characteristics (Page 201 Section 4.4.9 Paragraph 1). Fennema teaches that acetylation of starch lowers gelatinization temperature, improves paste clarity, and provides stability to coating compositions (page 202). Fennema teaches that modified starch usually has a substitution level of less than 0.1 and generally within the range of 0.002-0.2 (Page 201 Section 4.4.9 Paragraph 3).

Regarding the wheat starch as substituted to about 0.1%, as Lazard teaches of a modified starch but does not teach of the substitution level of the starch, one of ordinary skill in the art would have been motivated to look to the food art, such as Fennema, to find the starch substitution level. One would have been motivated to use starch with a substitution level of 0.002-0.2 as taught by Fennema since it was commonly utilized in foods and would be readily available.

Regarding the wheat starch as including acetylated starch, i would have been obvious to one of ordinary skill in the art at the time the invention was made for the modified starch in the coating composition as taught by Lazard to include acaetylated starch in view of Fennema. One would have been motivated to use acetylated starch in the coating in order to improve paste clarity and provide stabilization as taught by Fennema.

Response to Arguments

Roskam:

Applicant argues in the remarks and declarations filed May 26, 2009 and March 29, 2010 and July 15, 2009, that the inventors conceived and reduced the instantly claimed invention to practice before the priority date of Roskam, thus removing Roskam as prior art.

Applicant's argument is convincing for claims 10-13 and 35-49 as shown above as applicant's 131 affidavit has shown prior invention to the coating containing about 49-90% starch and about 30-32% corn dextrin.

Applicant's argument has been fully considered but is not persuasive for the remaining claims as the affidavit does not establish possession of whole invention as claimed or something falling within the claim, in the sense that the claim as a whole reads on it (MPEP 715.02). For example, the affidavit shows a coating that was reduced to practice with a starch percentage of about dextrin of about 32%; the affidavit does not include starch coating showing 5% dextrin or 75% dextrin. There is no evidence provided to support that the instantly claimed invention was in fact conceived and reduced to practice prior to the prior art date of March 6, 2003. Thus, as stated above, applicant's affidavit and arguments concerning the affidavit are not convincing as there is no evidence to show conception and reduction to practice of the instantly claimed invention prior to the prior art date of Roskam.

Lazard:

Applicant's arguments and declaration filed March 29, 2010 have been fully considered but they are not persuasive.

Applicant argues in the declaration and remarks that Lazard does not teach of 49.31-100% starch by dry weight in the coating composition as instantly claimed; Applicant argues the most Lazard teaches is 40% starch. Applicant's argument is not convincing as 40% starch taught by Lazard is by total weight of the coating composition and not by dry weight. As discussed above, Lazard teaches that the coating composition contains 12.5-66.7% starch by dry weight of the coating composition. Applicant refutes this response with an argument and evidence in the declaration that

Art Unit: 1781

the coating of Lazard can only be formed with more than 55% by weight of water in the coating and thus the calculations of Lazard wherein the coating contains only 5-40% water are incorrect. The evidence and thus the argument is not convincing as the experimental ingredients of Lazard do not include all essential ingredients, such as 10-40% plasticizer, as taught by Lazard; In other words, applicant has shown that a portion of the required composition taught by Lazard will not form a coating composition unless the water content is greater than 55%; applicant has not shown that the water content of 5-40% as taught by Lazard is ineffective.

Applicant argues in the declaration and the remarks that the coating of Lazard is visible as it contains fat and gelatin. Applicant's argument is not convincing as fat is an optional ingredient (abstract) and as Lazard teaches that the coating composition is translucent (Page 9, lines 19-24). Applicant's additional evidence cited in the declaration is not convincing as the experimental ingredients of Lazard do not include all essential ingredients, and thus do not represent an accurate representation of the teachings, and as from the pictures given of exhibit C it cannot be determined that the pastry coating is not clear. Additionally it is noted that not all of the claims require an invisible or clear coat, but rather only a "substantially clear" coating.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

Art Unit: 1781

double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23 and 35-49 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 12/257,249 ('249) in view of Tsen et al (US 3773521).

Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite claims which are directed towards a dough composition at least partially coated with an invisible coating posses a slurry pick up of about 5-10% and which comprises about 35-45% solids comprising oxidized and acetylated wheat starch that is 0.1% substituted, about 5-60% low solubility corn dextrin, about 0.5-3% stabilizer including xanthan gum, about 0.5-5% emulsifier, about 5-30% sweetener including sucrose, and a leaving system comprising about 0.5-5% sodium acid pyrophosphate and about 0.5-5% sodium bicarbonate. '249 does not claim the food substrate as a wheat flour pastry as recited in claims 1 and 17, specifically a toaster pastry as recited in claim 35, and to the pastry product as a low moisture content dough as recited in claim 3, and to the dextrin as corn dextrin.

Tsen et al (Tsen) teaches that wheat flour based breads, baked or fired foods are staple foods in many countries because of their relatively high caloric value, ready availability of wheat flour at an economical price, and attractive organoleptic and appearance properties of the food products (Column 1 lines 20-25).

Regarding the dough substrate as a pastry, specifically a toaster pastry, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the dough substrate to be toaster pastry or other type depending on the final product desired. For example, one would have been motivated to use a toaster pastry in order to have a final product which was sweet and which could be heated in the toaster before consumption.

Art Unit: 1781

Regarding the pastry product as comprising wheat flour, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise particular ingredients depending on the final product desired. For example, one would have been motivated for the pastry product to comprise wheat flour in order to produce a high caloric product. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise wheat flour since it is readily available at an economical price, and has attractive organoleptic and appearance properties when used in food products, as taught by Tsen.

Regarding the pastry product as low moisture content dough, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to be of low or high moisture dough depending on the final product desired. For example, one would have been motivated to use a low moisture dough product in order to have a drier more crunchy final product. Both low and high moisture content dough were well known at the time the invention was made and to choose one or the other for the pastry product of '249 would be within the routine determination of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

Regarding the dextrin as corn dextrin, it would have been obvious to one of ordinary skill in the art for the dextrin as claimed by '249 to be a conventionally used and known dextrin, including corn dextrin, based on what source was most available and affordable at the time the invention was made. To choose one functionally equivalent source of dextrin or another would have been within the routine determination of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 4, 7, 14-19, 22, and 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7, 9, and 16 of copending Application No. 11/933,091 ('091) in view of Tsen et al (US 3773521).

Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite claims which are directed towards a dough compositions, including a pastry, at least partially coated with an invisible coating which comprises 53.02% or more oxidized and acetylated starch, about 4-20% low solubility corn dextrin, and less than 1% stabilize. '091 does not claim the pastry as a wheat based pastry as recited in claims 1 and 17, specifically a toaster pastry as recited in claim 35, to the pastry product as a low moisture content dough as recited in claim 3, to the application temperature of the coating as from about 40-100F as recited in claim 4, to a sweetener ingredient of granulated sugar, and to the dextrin as corn dextrin as recited in claim 17.

Tsen et al (Tsen) teaches that wheat flour based breads, baked or fired foods are staple foods in many countries because of their relatively high caloric value, ready availability of wheat flour at an economical price, and attractive organoleptic and appearance properties of the food products (Column 1 lines 20-25).

Regarding the dough substrate as a toaster pastry, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the dough substrate to be toaster pastry or other type depending on the final product desired. For example, one would have been motivated to use a toaster pastry in order to have a final product which was sweet and which could be heated in the toaster before consumption.

Regarding the pastry product as comprising wheat flour, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise particular ingredients depending on the final product desired. For example, one would have been motivated for the pastry product to comprise wheat flour in order to produce a high caloric product. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise wheat flour since it is ready availability at an economical price, and has

Art Unit: 1781

attractive organoleptic and appearance properties when used in food products, as taught by Tsen.

Regarding the pastry product as low moisture content dough, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to be of low or high moisture dough depending on the final product desired. For example, one would have been motivated to use a low moisture dough product in order to have a drier more crunchy final product. Both low and high moisture content dough were well known at the time the invention was made and to chose one or the other for the pastry product of '091 would be within the routine determination of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

Regarding the coating as applied between about 40-100F, it would have been obvious and common sense to one of ordinary skill in the art at the time the invention was made for the coating composition of '091 to be applied at room temperature, i.e. about 70F, so that additional heating and/or cooling, and thus additional processing costs were not required for coating.

Regarding the coating composition as comprising about 10-20% or about 14% granulated sugar, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a desired flavoring in the coating composition as taught by '091. One would have been motivated to use the well known flavorant, granular sugar, in the coating composition in order to impart a sweet flavor. One would have been further motivated to include an amount of sugar depending on the desired sweetness in the final product. To adjust the sweetness of a food product by adding granular sugar was well known and would be routine determination of one of ordinary skill in the art at the time the invention was made.

Regarding the dextrin as corn dextrin, it would have been obvious to one of ordinary skill in the art for the dextrin as claimed by '091 to be a conventionally used and known dextrin, including corn dextrin, based on what source was most available and affordable at the time the invention was made. To chose one functionally equivalent source of dextrin or another would have be within the routine determination

Art Unit: 1781

of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 4, 7, 14-19, 22, and 23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, 9, 16, 18, 51, and 52 of U.S. 7,294,355 ('355) in view of Tsen et al (US 3773521).

Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite claims which are directed towards a dough compositions, including a pastry, at least partially coated with an invisible coating which comprises 53.02% or more oxidized and acetylated starch and about 4-20% dextrin. '091 does not claim the pastry as a wheat based pastry as recited in claims 1 and 17, specifically a toaster pastry as recited in claim 35, to the pastry product as a low moisture content dough as recited in claim 3, to the application temperature of the coating as from about 40-100F as recited in claim 4, to a sweetener ingredient of granulated sugar, and to the dextrin as corn dextrin as recited in claim 17.

Tsen et al (Tsen) teaches that wheat flour based breads, baked or fired foods are staple foods in many countries because of their relatively high caloric value, ready availability of wheat flour at an economical price, and attractive organoleptic and appearance properties of the food products (Column 1 lines 20-25).

Regarding the dough substrate as a toaster pastry, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the dough substrate to be toaster pastry or other type depending on the final product desired. For example, one would have been motivated to use a toaster pastry in order to have a final product which was sweet and which could be heated in the toaster before consumption.

Regarding the pastry product as comprising wheat flour, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise particular ingredients depending on the final product desired.

Art Unit: 1781

For example, one would have been motivated for the pastry product to comprise wheat flour in order to produce a high caloric product. It would have been further obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to comprise wheat flour since it is readily available at an economical price, and has attractive organoleptic and appearance properties when used in food products, as taught by Tsen.

Regarding the pastry product as low moisture content dough, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pastry product to be of low or high moisture dough depending on the final product desired. For example, one would have been motivated to use a low moisture dough product in order to have a drier more crunchy final product. Both low and high moisture content dough were well known at the time the invention was made and to choose one or the other for the pastry product of '355 would be within the routine determination of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

Regarding the coating as applied between about 40-100F, it would have been obvious and common sense to one of ordinary skill in the art at the time the invention was made for the coating composition of '355 to be applied at room temperature, i.e. about 70F, so that additional heating and/or cooling, and thus additional processing costs were not required for coating.

Regarding the coating composition as comprising about 10-20% or about 14% granulated sugar, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a desired flavoring in the coating composition as claimed by '355. One would have been motivated to use the well known flavorant, granular sugar, in the coating composition in order to impart a sweet flavor. One would have been further motivated to include an amount of sugar depending on the desired sweetness in the final product. To adjust the sweetness of a food product by adding granular sugar was well known and would be routine determination of one of ordinary skill in the art at the time the invention was made.

Art Unit: 1781

Regarding the dextrin as corn dextrin, it would have been obvious to one of ordinary skill in the art for the dextrin as claimed by '355 to be a conventionally used and known dextrin, including corn dextrin, based on what source was most available and affordable at the time the invention was made. To chose one functionally equivalent source of dextrin or another would have be within the routine determination of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY BEKKER whose telephone number is (571)272-2739. The examiner can normally be reached on Monday through Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kelly Bekker/
Examiner
Art Unit 1781